

still be used as a general term for all the forms to which the name has been applied, as the term *Zoophyte* was formerly used for such different beings as the Hydrozoa, the Actinozoa, and the Polyzoa.

## EXPLANATION OF PLATE X.

*Callograptus radicans*, Hopk., natural size. Photo-lithographed from a specimen collected by the author in the Arenig rocks, Ramsey Island, St. David's, South Wales.

XXXVI.—*The Mollusca of Europe compared with those of Eastern North America.* By J. GWYN JEFFREYS, F.R.S.\*

AFTER mentioning that he had dredged last autumn on the coast of New England in a steamer provided by the Government of the United States, and that he had inspected all the principal collections of Mollusca made in Eastern North America, the author compared the Mollusca of Europe with those of Massachusetts. He estimated the former to contain about 1000 species (viz. 200 land and freshwater, and 800 marine), and the latter to contain about 400 species (viz. 110 land and freshwater, and 290 marine); and he took Mr. Binney's edition of the late Professor Gould's 'Report on the Invertebrata of Massachusetts,' published in 1870, as the standard of comparison. That work gives 401 species, of which Mr. Jeffreys considered 41 to be varieties and the young of other species, leaving 360 apparently distinct species. About 40 species may be added to this number in consequence of the recent researches of Professor Verrill and Mr. Whiteaves on the coast of New England and in the Gulf of St. Lawrence. Mr. Jeffreys identified 173 out of the 360 Massachusetts species as European, viz. land and freshwater 39 (out of 110), and marine 134 (out of 250), the proportion in the former case being 28 per cent., and in the latter nearly 54 per cent.; and he produced a tabulated list of the species in support of his statement. He proposed to account for the distribution of the North-American Mollusca thus identified, by showing that the land and freshwater species had probably migrated from Europe to Canada through Northern Asia, and that most of the marine species must have been transported from the Arctic seas by Davis's-Strait current southwards to Cape Cod, and the remainder from the Mediterranean and western coasts of the Atlantic by the Gulf-stream in a northerly direction. He renewed his objection to the term "representative species."

\* An abstract of a communication made by the author to the Brighton Meeting of the British Association, and now published at his request.

The author concluded by expressing his gratitude for the kind hospitality and attention which he received from naturalists during his visit to North America last year.

*Mollusca of Eastern North America, according to Binney's edition of Gould's 'Invertebrata of Massachusetts.'*

Page.	Name of Species.	North or South of Cape Cod.	European.	Synonyms and Remarks.
28	<i>Teredo navalis</i> , Linné .....	N	E	Wood's Hole, Mass. (J. G. J.).
29	— <i>Norvagia</i> , Spengler ...	N	E	
30	— <i>megotara</i> , Hanley .....	N	E	
31	— <i>Thompsonii</i> , Tryon.....	S		
32	— <i>dilatata</i> , Stimpson .....	N	.....	<i>T. megotara</i> , variety.
33	— <i>chlorotica</i> , Gould (1870).	N	E	<i>T. pedicellata</i> , Quatrefages (1849), var.
34	<i>Xylotrya fimbriata</i> , Jeffreys ...	S		
36	<i>Pholas costata</i> , L.....	S		
38	— <i>truncata</i> , Say .....	S		
39	<i>Zurfaea crispata</i> , L. ....	N	E	Genus <i>Pholas</i> .
40	<i>Solen ensis</i> , L. ....	N	E	
43	<i>Solecurtus gibbus</i> , Sp. ....	S		
44	— <i>divisus</i> , Sp. ....	S		
46	<i>Machæra squama</i> , Blainville .	N	.....	<i>G. Siliqua</i> .
47	— <i>costata</i> , Say .....	N		<i>G. Siliqua</i> .
48	<i>Solemya velum</i> , Say (1822)...	N	.....	<i>S. togata</i> , young.
50	— <i>borealis</i> , Totten (1834) ..	N	E	<i>S. togata</i> , Poli (1791).
51	<i>Panopæa arctica</i> , Lamarek (1818).....	N	E	<i>Saxicava Norvegica</i> , sp. (1793).
53	<i>Glycymeris siliqua</i> , Chemnitz .	N	E	<i>G. Cyrtodaria</i> .
55	<i>Mya arenaria</i> , L. ....	N	E	
58	— <i>truncata</i> , L. ....	N	E	
60	<i>Corbula contracta</i> , Say.....	S		
61	<i>Neera pellucida</i> , St.....	N	E	
62	<i>Pandora trilincata</i> , Say .....	N		
64	<i>Lyonsia hyalina</i> , Conrad .....	N	.....	Allied to <i>L. Norvegica</i> .
65	— <i>arenosa</i> , Moller .....	N	E	
66	<i>Anatina papyracea</i> , Say .....	N		
68	<i>Cochlodesma Leanum</i> , Cour. .	N	.....	Allied to <i>Thracia prætenuis</i> , which is European.
69	<i>Thracia Conradi</i> , Couthouy (1838).....	N	.....	<i>T. inflata</i> , J. Sowerby (1845).
71	— <i>myopsis</i> (Beek), Möll. (1842).....	N	E	<i>T. truncata</i> , Brown (1827).
72	— <i>truncata</i> , Mighels & Adams (1842).....	N	E	Not <i>T. truncata</i> , Br. <i>T. septentrionalis</i> , Jeffr. MS.
73	<i>Mactra solidissima</i> , Ch. ....	N	.....	Lovén received a single valve from Finmark.
75	— <i>ovalis</i> , Gould .....	N	.....	<i>M. solidissima</i> , var.
77	— <i>lateralis</i> , Say .....	N	.....	Allied to <i>M. subtruncata</i> , which is European.
79	<i>Cumingia tellinoides</i> , Conr....	S		
80	<i>Ceronia aretata</i> , Conr. ....	N	.....	<i>Mesodesma deauratum</i> , var.
81	— <i>deaurata</i> , Turton .....	N	.....	<i>G. Mesodesma</i> .

Page.	Name of Species.	North or South of Cape Cod.	European.	Synonyms and Remarks.
83	<i>Kellia planulata</i> , <i>St.</i> .....	N	.....	<i>G. Lasea</i> .
83	— <i>suborbicularis</i> , <i>Montagu</i> .	N	E	
85	<i>Turtonia minuta</i> , <i>Fabricius</i> ...	N	E	<i>G. Cyanium</i> .
86	<i>Montacuta elevata</i> , <i>St.</i> .....	N	E	
87	<i>Saxicava rugosa</i> , <i>Pennant</i> .....	N	E	Linné instead of Pennant.
89	— <i>arctica</i> , <i>L.</i> .....	N	.....	<i>S. rugosa</i> , var.
90	<i>Petricola pholadiformis</i> , <i>Lam.</i>	N	.....	Valentia, Ireland; a fragment.
92	— <i>dactylus</i> , <i>Say</i> .....	N	.....	<i>P. pholadiformis</i> , var.
93	<i>Macoma fusca</i> , <i>Say</i> (1826) ...	N	E	<i>Tellina Balthica</i> , L. (1766).
95	— <i>proxima</i> , <i>Gray</i> (1839)...	N	E	<i>T. calcaria</i> , Ch. (1782).
96	<i>Tellina tenta</i> , <i>Say</i> .....	S		
97	— <i>tenera</i> , <i>Say</i> .....	N	.....	Allied to <i>T. tenuis</i> .
98	<i>Lucina filosa</i> , <i>St.</i> (1851) .....	N	E	<i>L. borealis</i> , L. (1766).
99	— <i>dentata</i> , <i>Wood</i> .....	S		
100	<i>Cryptodon Gouldii</i> , <i>Philippi</i> (1845).....	N	E	<i>Axinus flexuosus</i> , Mont., var. (1803).
101	<i>Sphærinum simile</i> , <i>Say</i> (1816).	N	.....	<i>S. striatinum</i> , Lam. (1818).
103	— <i>partumeium</i> , <i>Say</i> (1822)	N	E	<i>S. lacustre</i> , Müller (1774).
104	— <i>rhomboideum</i> , <i>Say</i> .....	N	.....	Allied to <i>S. corneum</i> , which is European.
105	— <i>Vermontanum</i> , <i>Prime</i> (1861).....	N	E	<i>S. pisidioides</i> , Gray (1856). Perhaps introduced into England.
106	— <i>truncatum</i> , <i>Linsley</i> .....	N	.....	<i>S. lacustre</i> , var.
107	— <i>tenuis</i> , <i>Prime</i> .....	N		
107	— <i>securis</i> , <i>Prime</i> .....	N	.....	<i>S. lacustre</i> , var. <i>Rykholtii</i> .
108	— <i>occidentale</i> , <i>Prime</i> .....	N		
109	<i>Pisidium dubium</i> , <i>Say</i> (1816)	N	E	<i>P. amnicum</i> , Müll. (1774).
110	— <i>Adamsii</i> , <i>Prime</i> (1851)...	N	E	<i>P. fontinale</i> , Draparnaud (1805).
110	— <i>compressum</i> , <i>Prime</i> .....	N		
112	— <i>æquilaterale</i> , <i>Prime</i> .....	N	.....	Allied to <i>P. nitidum</i> , which is European.
113	— <i>ferrugineum</i> , <i>Prime</i> .....	N	.....	<i>P. pusillum</i> , var. <i>obtusalis</i> .
113	— <i>abditum</i> , <i>Haldeman</i> (1841).....	N	E	<i>P. pusillum</i> , Gmelin (1788).
115	— <i>variabile</i> , <i>Prime</i> .....	N		
116	— <i>ventricosum</i> , <i>Prime</i> .....	N	.....	Possibly some of these North- American species may be re- duced in number.
117	<i>Astarte castanea</i> , <i>Say</i> .....	N	.....	Perhaps a variety of <i>A. borealis</i> , Ch.
119	— <i>sulcata</i> , <i>Da Costa</i> .....	N	E	Including <i>A. undata</i> , Gould = <i>A. Omaliï</i> , J. Sow.
121	— <i>semisulcata</i> , <i>Leach</i> (1817)	N	E	<i>A. borealis</i> , Ch. (1784), var.
123	— <i>quadrans</i> , <i>Gould</i> .....	N	.....	<i>A. castanea</i> , var. <i>nana</i> .
124	— <i>elliptica</i> , <i>Hanley</i> .....	N	.....	<i>A. sulcata</i> , var.
125	— <i>Banksii</i> , <i>Leach</i> (1817)...	N	E	<i>A. compressa</i> , Mont. (1803), var.
126	— <i>crebricostata</i> , <i>Forbes</i> (1847).....	N	E	<i>A. depressa</i> , Br. (1827).

Page.	Name of Species.	North or South of Cape Cod.	European.	Synonyms and Remarks.
127	<i>Astarte Portlandica</i> , <i>Mighels</i> .	N	.....	<i>A. compressa</i> , var.
128	<i>Gouldia mactracea</i> , <i>Linsley</i> ...	N	.....	<i>G. Crassatella</i> .
129	<i>Cyprina Islandica</i> , <i>L.</i> .....	N	E	
131	<i>Cytherea convexa</i> , <i>Say</i> .....	N	.....	<i>G. Venus</i> .
133	<i>Venus mercenaria</i> , <i>L.</i> .....	N		
135	— <i>notata</i> , <i>Say</i> .....	N	.....	<i>V. mercenaria</i> , var.
136	<i>Tapes fluctuosa</i> , <i>Gould</i> .....	N	E	<i>G. Venus</i> .
137	<i>Gemma gemma</i> , <i>Totten</i> .....	N	.....	<i>V. mercenaria</i> , young.
138	— <i>Manhattensis</i> , <i>Prime</i> ...	S		
139	<i>Cardium Islandicum</i> , <i>L.</i> .....	N	E	
141	— <i>elegantulum</i> ( <i>Beck</i> ), <i>Moll.</i> .....	N	E	
143	<i>Liocardium Mortoni</i> , <i>Conr.</i> ...	N	.....	<i>G. Cardium</i> .
144	<i>Aphrodita Grœnlandica</i> , <i>Ch.</i> .	N	E	
146	<i>Cardita borealis</i> , <i>Conr.</i> (1836)	N	E	<i>C. sulcata</i> , <i>Bruguière</i> (1792). var.
147	<i>Arca pexata</i> , <i>Say</i> .....	S		
148	— <i>transversa</i> , <i>Say</i> .....	N	.....	<i>A. pexata</i> , var.
149	<i>Nucula tenuis</i> , <i>Mont.</i> .....	N	E	
150	— <i>proxima</i> , <i>Say</i> .....	N		
152	— <i>expansa</i> , <i>Reeve</i> .....	N	.....	<i>N. tenuis</i> , var.
153	— <i>delphinodonta</i> , <i>Migh.</i> ...	N	E	
154	<i>Yoldia limatula</i> , <i>Say</i> (1831)...	N	E	<i>Y. arctica</i> , <i>Sars.</i> <i>G. Leda</i> .
155	— <i>obesa</i> , <i>St.</i> .....	N	.....	Allied to <i>Leda lucida</i> , which is European.
156	— <i>siliqua</i> , <i>Reeve</i> (1855) ..	N	E	<i>L. arctica</i> , <i>Gray</i> (1819).
157	— <i>thraciæformis</i> , <i>Storer</i> ...	N	E	<i>G. Leda</i> .
159	— <i>sapotilla</i> , <i>Gould</i> (1841) .	N	E	<i>L. hyperborea</i> , <i>Lov.</i> (1846).
160	— <i>myalis</i> , <i>Couth.</i> .....	N	.....	<i>G. Leda</i> .
161	<i>Leda tenuisulcata</i> , <i>Couth.</i> (1838) .....	N	E	<i>L. pernula</i> , <i>Müll.</i> (1770), var.
163	— <i>Jacksonii</i> , <i>Gould</i> .....	N	.....	<i>L. pernula</i> , var.
164	— <i>minuta</i> , <i>Fabr.</i> .....	N	E	<i>Müll.</i> instead of <i>Fabr.</i>
165	— <i>caudata</i> , <i>Donovan</i> .....	N	.....	<i>L. minuta</i> , var.
167	<i>Unio complanatus</i> , <i>Solander</i> ..	N		
169	— <i>nasutus</i> , <i>Say</i> .....	N		
170	— <i>radiatus</i> , <i>Gm.</i> .....	S		
172	— <i>cariosus</i> , <i>Say</i> .....	S		
173	— <i>ochraceus</i> , <i>Say</i> .....	S	.....	Perhaps <i>U. cariosus</i> , var.
174	<i>Margaritana arcuata</i> , <i>Barnes</i> (1823) .....	N	E	<i>Unio margaritifera</i> , <i>L.</i> (1766).
176	— <i>undulata</i> , <i>Say</i> .....	S	.....	<i>G. Unio</i> .
177	— <i>marginata</i> , <i>Gould</i> .....	S	.....	<i>G. Unio</i> .
178	<i>Anodon fluviatilis</i> , <i>Lea</i> .....	S	.....	<i>Dillwyn</i> (1817) instead of <i>Lea</i> . <i>Anodonta cygnea</i> , <i>L.</i> (1766).
180	— <i>implicata</i> , <i>Say</i> .....	N	.....	<i>G. Anodonta</i> . <i>A. cygnea</i> , var.
182	— <i>undulata</i> , <i>Say</i> .....	S	.....	<i>G. Anodonta</i> .
183	<i>Mytilus edulis</i> , <i>L.</i> .....	N	E	
186	<i>Modiola modiolus</i> , <i>L.</i> .....	N	E	<i>G. Mytilus</i> .
188	— <i>plicatula</i> , <i>Lam.</i> .....	N	.....	<i>G. Mytilus</i> .
190	<i>Modiolaria nigra</i> , <i>Gray</i> .....	N	E	
192	— <i>discors</i> , <i>L.</i> .....	N	E	

Page.	Name of Species.	North or South of Cape Cod.	European.	Synonyms and Remarks.
193	<i>Modiolaria corrugata</i> , <i>St.</i> .....	N	E	
194	<i>Crenella glandula</i> , <i>Tott.</i> .....	N		
195	— <i>pectinula</i> , <i>Gould</i> (1841).	N	E	<i>C. faba</i> , Fabr. (1780).
196	<i>Pecten tenuicostatus</i> , <i>Migh.</i> & <i>Ad.</i> .....	N		
198	— <i>Islandicus</i> , <i>Müll.</i> .....	N	E	
199	— <i>irradians</i> , <i>Lam.</i> .....	N		
200	— <i>fuscus</i> , <i>Linsl.</i> .....	N	....	<i>P. irradians</i> , young.
202	<i>Ostrea Virginiana</i> , <i>Lister</i> .....	N		
203	— <i>borealis</i> , <i>Lam.</i> .....	S	.....	<i>O. Virginiana</i> , var.
204	<i>Anomia ephippium</i> , <i>L.</i> .....	N	E	
204	— <i>aculeata</i> , <i>Gm.</i> .....	N	.....	<i>A. ephippium</i> , var.
205	— <i>electrica</i> , <i>L.</i> .....	N	.....	<i>A. ephippium</i> , var.
206	— <i>squamula</i> , <i>L.</i> .....	N	.....	<i>A. ephippium</i> , young.
208	<i>Terebratulina septentrionalis</i> , <i>Couth.</i> (1839) .....	N	E	<i>Terebratula caput-serpentis</i> , L. (1764), var.
210	<i>Rhynchonella psittacea</i> , <i>Gm.</i> ..	N	E	
211	<i>Waldheimia eranium</i> , <i>Gm.</i> ...	N	E	Müll., instead of Gm. <i>G. Terebratula</i> .
213	<i>Philine sinuata</i> , <i>St.</i> .....	N	.....	Allied to <i>P. nitida</i> , which is European.
213	— <i>quadrata</i> , <i>S. Wood.</i> .....	N	E	
214	— <i>lineolata</i> , <i>Couth.</i> (1839) ..	N	E	<i>P. lima</i> , Br. (1827).
215	<i>Scaphander puncto-striatus</i> , <i>Migh.</i> & <i>Ad.</i> (1842) .....	N	E	<i>S. librarius</i> , Lov. (1846).
216	<i>Diaphana hiemalis</i> , <i>Couth.</i> (1839).....	N	E	<i>Utriculus globosus</i> , Lov. (1846).
216	— <i>debilis</i> , <i>Gould</i> (1840) ...	N	E	<i>Utriculus hyalinus</i> , Turt. (1834).
217	<i>Utriculus Gouldii</i> , <i>Couth.</i> (1839) .....	N	E	<i>U. turritus</i> , Möll. (1842).
218	— <i>pertenuis</i> , <i>Migh.</i> .....	N	.....	<i>U. Gouldii</i> , young.
219	— <i>canaliculatus</i> , <i>Say</i> .....	S		
220	<i>Cylichna alba</i> , <i>Br.</i> .....	N	E	
221	— <i>oryza</i> , <i>Tott.</i> (1835) .....	N	E	<i>Bulla utriculus</i> , Brocchi (1814).
222	<i>Bulla incincta</i> , <i>Migh.</i> .....	N		
222	— <i>solitaria</i> , <i>Say</i> .....	S		
223	— <i>occulta</i> , <i>Migh.</i> & <i>Ad.</i> (1842) ... ..	N	E	<i>Cylichna striata</i> , Br. (1827).
224	<i>Tornatella puncto-striata</i> , <i>Ad.</i>	S	.....	Perhaps <i>Actæon pusillus</i> . <i>G. Actæon</i> .
226	<i>Polycera Lessonii</i> , <i>D'Orbigny.</i>	N	E	
228	<i>Doris bilamellata</i> , <i>L.</i> .. ..	N	E	
229	— <i>tenella</i> , <i>Agassiz</i> .....	N	.....	Perhaps <i>D. inconspicua</i> , which is European.
229	— <i>pallida</i> , <i>Ag.</i> (1870) .....	N	E	<i>D. aspera</i> , Alder & Hancock (1842).
230	— <i>diademata</i> , <i>Ag.</i> (1870)...	N	E	<i>D. tuberculata</i> , Cuvier (1802).
231	— <i>planulata</i> , <i>St.</i> (1853) ...	N	E	<i>D. repanda</i> , A. & H. (1842).
232	— <i>grisea</i> , <i>St.</i> .....	N	.....	"Very closely allied to <i>D. inconspicua</i> ."

Page.	Name of Species.	North or South of Cape Cod.	European.	Synonyms and Remarks.
233	<i>Ancula sulphurea</i> , St. ....	N	.....	"Very like to <i>Ancula cristata</i> ," which is European.
234	<i>Dendronotus arborescens</i> , Müll. ....	N	E	.
236	<i>Doto coronata</i> , Gm. ....	N	E	
238	<i>Æolis papillosa</i> , L. ....	N	E	
240	— <i>salmonacea</i> , De Kay (1843) .....	N	.....	<i>Eolis bodoensis</i> , Möll. (1842).
241	— <i>Bostoniensis</i> , Couth.....	N	.....	"Approaching closely <i>E. coro-</i> <i>nata</i> of Forbes," which is European.
242	— <i>rufibranchialis</i> , Johnston.	N	E	
243	— <i>pilata</i> , Gould .....	N		
245	— <i>stellata</i> , St. ....	N		
246	— <i>purpurea</i> , St. ....	N		
246	— <i>picta</i> , A. & H. ....	N	E	
247	— <i>diversa</i> , Couth.....	N		
248	— <i>despecta</i> , Johnst. ....	N	E	
249	— <i>gymnota</i> , De Kay.....	N	.....	"Nearly allied to <i>E. concinna</i> ," which is European.
250	<i>Calliopæa</i> (?) <i>fuscata</i> , Gould...	N		
251	<i>Embletonia fuscata</i> , Gould ...	N		
252	— <i>remigata</i> , Gould .....	N		
253	<i>Hermæa cruciata</i> , Alex. Ag....	S		
254	<i>Alderia Harvardiensis</i> , Ag ...	N		
255	<i>Elysia chlorotica</i> , Ag. ....	N		
256	<i>Placobranchus catulus</i> , Ag. ...	N		
258	<i>Limapontia zonata</i> , St.....	N		
258	<i>Chiton apiculatus</i> , Say.....	S		
259	— <i>cinereus</i> , L. ....	S	E	<i>C. marginatus</i> , not <i>C. cinereus</i> . A single specimen only; ques- tionable.
260	— <i>ruber</i> , Lowe .....	N	E	
261	— <i>marmoreus</i> , Fabr. ....	N	E	
263	— <i>albus</i> , Mont.....	N	E	L., not Mont.
263	— <i>mendicarius</i> , Migh. & Ad. (1842) .....	N	E	<i>C. Hanleyi</i> (Bean), Thorpe (1844).
264	<i>Amicula Emersonii</i> , Couth. ...	N		
266	<i>Dentalium dentale</i> , L. ....	N	.....	<i>D. striolatum</i> , var.
266	<i>Entalis striolata</i> , St. (1851)...	N	E	<i>Dentalium abyssorum</i> , Sars (1858), var.
267	<i>Tectura testudinalis</i> , Müll. ...	N	E	
269	— <i>alveus</i> , Conr.....	N	.....	<i>T. testudinalis</i> , var.
270	<i>Lepeta cæca</i> , Müll. ....	N	E	
271	<i>Crepidula fornicata</i> , L.....	N	E	
272	— <i>plana</i> , Say .....	N	.....	<i>C. fornicata</i> , var.
273	— <i>convexa</i> , Say .....	N		
274	— <i>glauca</i> , Say .....	N	.....	<i>C. fornicata</i> , var.
275	<i>Crucibulum striatum</i> , Say ...	N		
276	<i>Cemoria noachina</i> , L. ....	N	E	<i>G. Puncturella</i> .
277	<i>Ianthina fragilis</i> , Deshayes ...	N	E	Lam., not Desh. Specific name changed to <i>communis</i> (1822).

Page.	Name of Species.	North or South of Cape Cod.	European.	Synonyms and Remarks.
278	<i>Adeorbis costulata</i> , <i>Moll.</i> .....	N	E	<i>G. Molleria</i> .
279	<i>Margarita cinerea</i> , <i>Couth.</i> ...	N	E	<i>G. Trochus</i> .
280	— <i>undulata</i> , <i>Sowerby</i> (1838)	N	E	<i>Trochus Grœnlandicus</i> , Ch. (1781).
281	— <i>helicina</i> , <i>Fabr.</i> .....	N	E	<i>G. Trochus</i> .
282	— <i>argentata</i> , <i>Gould</i> (1841).	N	E	<i>Trochus glaucus</i> , Möll. (1842).
283	— <i>obscura</i> , <i>Couth.</i> .....	N	E	<i>G. Trochus</i> .
284	— <i>acuminata</i> , <i>Migh. &amp; Ad.</i>	N	.....	<i>Trochus varicosus</i> , young.
285	— <i>varicosa</i> , <i>Migh. &amp; Ad.</i> (1842).....	N	E	<i>M. elegantissima</i> (Bean), S. Wood (1848). <i>G. Trochus</i> .
286	<i>Trochus occidentalis</i> , <i>Migh. &amp; Ad.</i> .....	N	E	
286	<i>Valvata tricarinata</i> , <i>Say</i> (1817)	N	E	<i>V. piscinalis</i> , Müll. (1774), var.
288	— <i>pupoidea</i> , <i>Gould</i> .....	N		
289	<i>Melantho decisa</i> , <i>Say</i> .....	N		
292	<i>Amnicola pallida</i> , <i>Haldeman</i> .	N	.....	<i>G. Hydrobia</i> .
293	— <i>limosa</i> , <i>Say</i> .....	N	.....	<i>G. Hydrobia</i> .
294	— <i>granum</i> , <i>Say</i> .....	S	.....	<i>G. Hydrobia</i> .
295	<i>Pomatiopsis lapidaria</i> , <i>Say</i> ...	S		
296	<i>Skenea planorbis</i> , <i>Fabr.</i> .....	N	E	
297	<i>Rissoella?</i> <i>eburnea</i> , <i>St.</i> .....	N	.....	<i>G. Rissoa</i> .
297	— <i>sulcosa</i> , <i>Migh.</i> .....	N	.....	<i>G. Rissoa</i> . One specimen only.
298	<i>Rissoa minuta</i> , <i>Tott.</i> (1834)...	N	E	<i>Hydrobia ventrosa</i> , Mont. (1803), var.
299	— <i>latior</i> , <i>Migh. &amp; Ad.</i> .....	N		
299	— <i>aculeus</i> , <i>Gould</i> (1841)...	N	E	<i>R. striata</i> , J. Adams (1795).
300	— <i>multilineata</i> , <i>St.</i> .....	N	.....	<i>R. striata</i> , var.
301	— <i>Mighelsi</i> , <i>St.</i> .....	N		
301	— <i>exarata</i> , <i>St.</i> .....	N		
301	— <i>carinata</i> , <i>Migh. &amp; Ad.</i> ...	N		
302	<i>Lacuna vineta</i> , <i>Mont.</i> (1803)...	N	E	<i>L. divaricata</i> , <i>Fabr.</i> (1780).
303	— <i>neritoidea</i> , <i>Gould</i> (1840)	N	E	<i>L. pallidula</i> , <i>Turt.</i> (1827), var.
304	<i>Littorina rudis</i> , <i>Don.</i> .....	N	E	<i>Maton</i> , instead of <i>Don</i> .
306	— <i>tenebrosa</i> , <i>Mont.</i> .....	N	E	<i>L. rudis</i> , var.
308	— <i>litorea</i> , <i>L.</i> .....	N	E	
309	— <i>palliata</i> , <i>Say</i> (1822) ...	N	E	<i>L. obtusata</i> , <i>L.</i> (1766), var. = <i>L. limata</i> , <i>Low.</i> (1846).
311	— <i>irrorata</i> , <i>Say</i> .....	S		
311	<i>Scalaria Nov-angliæ</i> , <i>Couth.</i> ...	N	.....	<i>S. multistriata</i> , var.
312	— <i>lineata</i> , <i>Say</i> .....	S		
313	— <i>multistriata</i> , <i>Say</i> .....	S		
314	— <i>Grœnlandica</i> , <i>Ch.</i> .....	N	E	
315	<i>Cæcum pulchellum</i> , <i>St.</i> .....	S		
316	<i>Vermetus radícula</i> , <i>St.</i> .....	S		
317	<i>Turritella erosa</i> , <i>Couth.</i> (1839).....	N	E	<i>T. polaris</i> , Möll. (1842).
318	— <i>reticulata</i> , <i>Migh. &amp; Ad.</i> (1842).....	N	E	<i>T. lactea</i> , Möll. (1842).
319	— <i>acicula</i> , <i>St.</i> .....	N		
320	<i>Aporrhais occidentalis</i> , <i>Beck.</i> ..	N		
321	<i>Bittium nigrum</i> , <i>Tott.</i> .....	S	.....	<i>G. Cerithium</i> .

Page.	Name of Species.	North or South of Cape Cod.	European.	Synonyms and Remarks.
322	<i>Bittium Greenii</i> , <i>Ad.</i> (1839)...	N	E	<i>Cerithiopsis tubercularis</i> , Mont. (1803).
323	<i>Triforis nigrocinctus</i> , <i>Ad.</i> ...	S		
325	<i>Odostomia producta</i> , <i>Ad.</i> .....	S		
325	— <i>fusca</i> , <i>Ad.</i> .....	S		
327	— <i>decaibata</i> , <i>St.</i> .....	N		
327	— <i>modesta</i> , <i>St.</i> .....	N		
327	— <i>bisuturalis</i> , <i>Say</i> .....	N		
328	— <i>trifida</i> , <i>Tott.</i> .....	S	.....	<i>O. impressa</i> , var.
329	— <i>seminuda</i> , <i>Ad.</i> .....	N		
330	— <i>impressa</i> , <i>Say</i> (1822) ...	S	.....	<i>O. calata</i> , Cailliaud (1865).
331	<i>Turbonilla interrupta</i> , <i>Tott.</i> (1834).....	N	E	<i>Melania rufa</i> , Ph. (1836), var. <i>G. Odostomia</i> .
331	— <i>nivea</i> , <i>St.</i> .....	N	.....	Perhaps <i>Turbo lacteus</i> , L. <i>G.</i>
332	<i>Eulima oleacea</i> , <i>Kurtz &amp; St.</i> ...	S		[ <i>Odostomia</i> .
333	<i>Menestho albula</i> , <i>Möll.</i> .....	N	.....	Apparently not this species, which is European.
334	<i>Velutina haliotoidea</i> , <i>Fabr.</i> (1780).....	N	E	<i>V. levigata</i> , Pennant (1777).
335	— <i>zonata</i> , <i>Gould</i> (1841) ...	N	E	<i>V. undata</i> , Brown (1827).
337	<i>Lamellaria perspicua</i> , <i>L.</i> .....	N	E	
338	<i>Lunatia heros</i> , <i>Say</i> (1822) ...	N	.....	<i>Natica catenoides</i> , S. Wood (1848).
340	— <i>triseriata</i> , <i>Say</i> .....	N	.....	<i>Natica heros</i> , young.
341	— <i>Grœnlandica</i> , <i>Möll.</i> .....	N	E	Beck, <i>vide</i> Möll. <i>G. Natica</i> .
342	<i>Natica clausa</i> , <i>Broderip &amp; Sow.</i> (1829).....	N	E	<i>N. affinis</i> , Gm. (1790).
344	— <i>pusilla</i> , <i>Say</i> .....	S		
344	<i>Mamma?</i> <i>immaculata</i> , <i>Tott.</i> ...	N	.....	<i>G. Natica</i> .
345	<i>Neverita duplicata</i> , <i>Say</i> .....	S	.....	<i>G. Natica</i> .
347	<i>Eulbus flavus</i> , <i>Gould</i> (1840) ..	N	E	<i>Natica Smithii</i> , Brown (1839) = <i>N. aperta</i> , Lov. (1846).
348	<i>Amauropsis helicoides</i> , <i>Johnst.</i> (1835).....	N	E	<i>Natica Islandica</i> , Gm. (1790).
349	<i>Pleurotoma bicarinata</i> , <i>Couth.</i>	N	E	
350	— <i>plicata</i> , <i>Ad.</i> (1842) .....	N	E	<i>P. declivis</i> , Lov. (1846).
351	<i>Bela turricula</i> , <i>Mont.</i> .....	N	E	<i>G. Pleurotoma</i> .
352	— <i>harpularia</i> , <i>Couth.</i> .....	N	E	<i>G. Pleurotoma</i> .
353	— <i>violacea</i> , <i>Migh. &amp; Ad.</i> (1842) .....	N	E	<i>Defrancia Beckii</i> , Möll. (1842). <i>G. Pleurotoma</i> .
354	— <i>decussata</i> , <i>Couth.</i> (1841).	N	E	<i>Pleurotoma Trevelyana</i> , Turt. (1834).
355	— <i>cancellata</i> , <i>Migh. &amp; Ad.</i> (1842) .....	N	E	<i>Defrancia Pingelii</i> , Möll. (1842). <i>G. Pleurotoma</i> .
355	— <i>pleurotomaria</i> , <i>Couth.</i> (1839).....	N	E	<i>Buccinum pyramidale</i> , Ström (179—). <i>G. Pleurotoma</i> .
356	<i>Columbella avara</i> , <i>Say</i> .....	S		
357	— <i>rosacea</i> , <i>Gould</i> (1840)...	N	E	<i>C. Holböllii</i> (Beck), Möll. (1842).

Page.	Name of Species.	North or South of Cape Cod.	European.	Synonyms and Remarks.
358	<i>Columbella dissimilis</i> , St. ...	N		
359	— <i>lunata</i> , Say .....	S		
360	<i>Purpura lapillus</i> .....	N	E	
362	<i>Nassa obsoleta</i> , Say .....	N	.....	Subgenus <i>Desmoulea</i> .
364	— <i>trivittata</i> , Say (1822) ...	N	.....	<i>N. propinqua</i> , J. Sow. (1824).
365	— <i>vibex</i> , Say.....	S		
366	<i>Buccinum undatum</i> , L. ....	N	E	
368	— <i>ciliatum</i> , Fabr.....	N	E	Not that species, but <i>B. undulatum</i> , Möll.
369	— <i>Donovani</i> , Gray (1839) ..	N	E	<i>B. glaciale</i> , L (1766).
370	— <i>cinereum</i> , Say .....	N	.....	<i>G. Urosa'pinx</i> , allied to <i>Purpura</i> .
371	<i>Fusus Islandicus</i> , Gm. ....	N	.....	Not that species, but <i>F. curtus</i> , Jeffr.
372	— <i>pygmæus</i> , St. ....	N	.....	Not <i>Buccinum Sabinii</i> or <i>Fusus Sabini</i> , Gray.
373	— <i>ventricosus</i> , Gray.....	N		
374	— <i>tornatus</i> , Gould (1840) ..	N	E	<i>F. despectus</i> , L. (1766).
375	— <i>decemcostatus</i> , Say .....	N		
377	<i>Trophon clathratus</i> , L. ....	N	E	Not that species, but <i>T. truncatus</i> , Str.
378	— <i>scalariformis</i> , Gould (1840) .....	N	E	<i>T. clathratus</i> , L. (1766).
379	— <i>muricatus</i> , Mont. ....	N	E	Doubtful as American.
380	<i>Busycon canaliculatum</i> , L. ...	S		
383	— <i>carica</i> , Gm. ....	S		
385	<i>Fasciolaria ligata</i> , Migh. & Ad.	N		
386	<i>Ranella caudata</i> , Say .....	S		
387	<i>Cerithiopsis Emersonii</i> , Ad....	S	.....	<i>G. Cerithium</i> , not <i>Cerithiopsis</i> .
389	— <i>terebralis</i> , Ad. (1841) ...	S	E	<i>C. trilineata</i> , Ph. (1836).
390	<i>Trichotropis borealis</i> , Sow. ...	N	E	Broderip and Sowerby's species.
391	<i>Admete viridula</i> , Fabr.....	N	E	
394	<i>Vitrina limpida</i> , Gould (1850)	N	E	<i>V. pellucida</i> , Müll. (1774).
395	<i>Hyalina cellaria</i> , Müll.....	N	E	<i>G. Zonites</i> .
396	— <i>arborea</i> , Say .....	N	.....	Closely allied to <i>Z. excavatus</i> , but umbilicus much less open.
397	— <i>electrina</i> , Gould (1841) ..	N	E	<i>Zonites radiatulus</i> , Alder (1830), var. <i>alba</i> .
398	— <i>indentata</i> , Say .....	N		
399	— <i>minusculea</i> , Binney .....	N		
400	— <i>Binneyana</i> , Morse .....	S		
401	— <i>milium</i> , Morse .....	N		
401	— <i>ferrea</i> , Morse.....	N		
402	— <i>chersina</i> , Say (1821) ...	N	E	<i>Zonites fulvus</i> , Müll. (1774).
403	— <i>minutissima</i> , Lea (1841)	N	E	<i>Helix pygmæa</i> , Drap. (1805).
404	— <i>multidentata</i> , Binney ...	N		
404	— <i>lineata</i> , Say .....	N		
406	<i>Macrocyclus concava</i> , Say.....	N		
407	<i>Limax maximus</i> , L. ....	N	E	
408	— <i>agrestis</i> , L. ....	N	E	
409	— <i>campestris</i> , Binney (1841)	N	E	<i>L. lævis</i> , Müll. (1774).

Page.	Name of Species.	North or South of Cape Cod.	European.	Synonyms and Remarks.
410	<i>Limax flavus</i> , L. ....	N	E	
412	<i>Helix alternata</i> , Say .....	N		
413	— <i>striatella</i> , Anthony .....	N		
415	— <i>asteriscus</i> , Morse .....	N		
415	— <i>labyrinthica</i> , Say .....	N		
417	— <i>hirsuta</i> , Say .....	N		
418	— <i>monodon</i> , Rackett .....	N		
420	— <i>palliata</i> , Say.....	N		
422	— <i>tridentata</i> , Say.....	N		
423	— <i>albolabris</i> , Say.....	N		
424	— <i>dentifera</i> , Binn. ....	N		
425	— <i>thyroides</i> , Say.....	N		
426	— <i>Sayii</i> , Binn. ....	N		
427	— ? <i>harpa</i> , Say.....	N	E	Sweden.
428	— <i>pulchella</i> , Müll. ....	N	E	
429	— <i>hortensis</i> , Müll. (1774)..	N	E	<i>H. nemoralis</i> , L. (1766), var.
431	<i>Cionella subcylindrica</i> , L.....	N	E	Perhaps that species, but described as inhabiting fresh water. <i>Cochlicopa lubrica</i> , Müll.
433	<i>Pupa muscorum</i> , L. ....	N	E	Linné's species is unascertainable. <i>P. marginata</i> , Drap.
433	— <i>Hoppii</i> , Möll. ....	N		
434	— <i>pentodon</i> , Say .....	N		
435	— <i>decora</i> , Gould .....	N		
436	— <i>fallax</i> , Say.....	S		
437	— <i>armifera</i> , Say .....	N		
438	— <i>contracta</i> , Say .....	N		
439	— <i>rupicola</i> , Say .....	N		
439	— <i>corticaria</i> , Say .....	N		
440	<i>Vertigo Gouldii</i> , Binn. (1843)	N	E	<i>V. alpestris</i> , Ald. (1830).
441	— <i>milium</i> , Gould.....	N		
442	— <i>Bollesiana</i> , Morse (1865)	N	E	<i>V. pygmaea</i> , Drap. (1801).
442	— <i>ovata</i> , Say (1822) .....	N	E	<i>V. antivertigo</i> , Drap. (1801).
443	— <i>ventricosa</i> , Morse (1865).	N	E	<i>V. Moulinsiana</i> , Dupuy (1843).
444	— <i>simplex</i> , Gould (1840)...	N	E	<i>V. edentula</i> , Drap. (1805).
445	<i>Succinea ovalis</i> , Gould (1841).	N	E	<i>S. elegans</i> , Risso (1826).
446	— <i>avara</i> , Say.....	N	.....	Allied to <i>S. putris</i> , var. <i>ochracea</i> .
447	— <i>obliqua</i> , Say (1824).....	N	E	<i>S. putris</i> , L. (1766).
448	— <i>Totteniana</i> , Lea .....	N	.....	<i>S. putris</i> , var.
451	<i>Arion fuscus</i> , Müll. (1774) ...	N	E	Perhaps that species. <i>A. hortensis</i> , Féruissac (1819).
453	<i>Zonites inornata</i> , Say .....	N	.....	<i>Zonites</i> is masculine; see De Montfort.
454	— <i>suppressa</i> , Say.....	N		
454	— <i>fuliginosa</i> , Griffith .....	N		
457	<i>Tebennophorus dorsalis</i> , Binn.	N		
465	<i>Alexia myosotis</i> , Drap.....	N	E	<i>G. Milampus</i> .
466	<i>Carychium exiguum</i> , Say (1822) .....	N	E	<i>C. minimum</i> , Müll. (1774).

Page.	Name of Species.	North or south of Cape Cod.	European.	Synonyms and Remarks.
467	<i>Melampus bidentatus</i> , Say ...	N	.....	Specific name preoccupied. <i>M. corneus</i> , Desh.
471	<i>Linnaea columella</i> , Say (1817)	N	E	<i>L. peregra</i> , Müll. (1774).
473	— <i>decollata</i> , Migh. ....	N	.....	<i>L. catascopium</i> , var.
474	— <i>ampla</i> , Migh. ....	N		
475	— <i>elodes</i> , Say (1821) ....	N	E	<i>L. palustris</i> , Müll. (1774).
478	— <i>desidiosa</i> , Say ....	N	.....	<i>L. truncatula</i> , var.
479	— <i>catascopium</i> , Say ....	S		
480	— <i>umbilicata</i> , Ad. ....	N	.....	Allied to <i>L. truncatula</i> .
481	— <i>pallida</i> , Ad. ....	N	.....	<i>L. truncatula</i> , var. <i>elegans</i> .
482	— <i>humilis</i> , Say (1822) ....	N	E	<i>L. truncatula</i> , Müll. (1774).
483	<i>Physa heterostropha</i> , Say ...	N	.....	More nearly allied to <i>P. rivallis</i> , Mat. & Rack. than to <i>P. fontinalis</i> .
485	— <i>ancillaria</i> , Say ....	S		
486	<i>Bulinus elongatus</i> , Say (1821)	N	E	<i>Physa hypnorum</i> , L. (1766).
488	<i>Planorbis trivolvis</i> , Say ....	N		
490	— <i>lentus</i> , Say ....	N	.....	<i>P. trivolvis</i> , var.
491	— <i>bicarinatus</i> , Say ....	N		
492	— <i>campanulatus</i> , Say ....	N		
493	— <i>hirsutus</i> , Gould (1840) ..	N	E	<i>P. albus</i> , Müll. (1774).
494	— <i>deflectus</i> , Say ....	N	.....	<i>P. albus</i> , var. <i>Draparnaldi</i> .
495	— <i>exacutus</i> , Say ....	N	.....	Allied to <i>P. nitidus</i> .
497	— <i>parvus</i> , Say (1817-19) ..	N	E	<i>P. glaber</i> , Jeffr. (1828).
498	— <i>dilatatus</i> , Gould ....	N	E	Perhaps introduced into England and naturalized.
499	<i>Segmentina armigera</i> , Say ...	N	.....	<i>G. Planorbis</i> .
501	<i>Ancylus parallelus</i> , Hald. ....	N	.....	Allied to <i>A. lacustris</i> .
502	— <i>fuscus</i> , Ad. ....	N		
504	<i>Diacria trispinosa</i> , Lesueur ...	N	E	<i>G. Cavolina</i> .
504	<i>Psyche globulosa</i> , Rang ....	N		
505	<i>Heterofusus balea</i> , Moll. ....	N	.....	<i>G. Spirialis</i> .
505	— <i>retroversus</i> , Fleming ...	N	E	<i>G. Spirialis</i> .
507	<i>Clione limacina</i> , Phipps (1773)	N	E	<i>C. papilionacea</i> , Pallas (1766).
509	<i>Loligopsis pavo</i> , Les. ....	N		
510	<i>Ommastrephes sagittatus</i> , Fér. & D'Orb. ....	N	.....	Lamarck's species. <i>G. Ommatostrephes</i> .
513	<i>Loligo punctata</i> , De Kay ....	S		
514	— <i>Pealei</i> , Les. ....	N		
516	<i>Spirula fragilis</i> , St. (1860) ...	S	.....	<i>S. australis</i> , Brug. (1789-92).